

Surge protection device - TTC-6P-3-EX-24DC-UT-I - 1064665

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Surge protection, consisting of protective plug and base element, with integrated status indicator for a 3-wire floating Ex i signal circuit.

Your advantages

- ✓ Space-saving installation due to the narrow overall width of 6.2 mm
- ✓ Signaling without additional auxiliary power, thanks to the mechanical status indicator
- ✓ Optional remote signaling module monitors up to 40 items, without additional wiring
- ✓ The signal is not influenced during maintenance work, thanks to the impedance-neutral insertion and removal of protective plugs
- ✓ Error-free replacement of protective plugs, thanks to coding
- ✓ Safe behavior in the event of overload, thanks to the integrated disconnect device
- ✓ Worldwide use in potentially explosive areas, thanks to ATEX and IECEx approvals
- ✓ Simple testing and documentation with CHECKMASTER 2, thanks to pluggable protective modules



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 722733
GTIN	4055626722733
Weight per Piece (excluding packing)	65.100 g
Custom tariff number	85363010
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Height	105.8 mm
Width	6.2 mm +0.1 mm
Depth	100 mm (incl. DIN rail 7.5 mm)

Surge protection device - TTC-6P-3-EX-24DC-UT-I - 1064665

Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Degree of protection	IP20

General

Housing material	PBT
Flammability rating according to UL 94	V-0
Color	sky blue RAL 5015
Mounting type	DIN rail: TH 35 - 7.5 mm
Type	DIN rail module, two-section, divisible
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	30 V DC
Rated current	5 A (55 °C)
Operating effective current I_C at U_C	≤ 5 μA
Residual current I_{PE}	≤ 1 μA
Nominal discharge current I_n (8/20) μs (line-line)	0.5 kA
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs (line-earth)	0.5 kA
Total discharge current I_{total} (8/20) μs	10 kA
Voltage protection level U_p (line-line)	≤ 68 V (C1 - 1 kV/500 A)
	≤ 50 V (C3 - 100 A)
	≤ 50 V (C3 - 25 A)
Voltage protection level U_p (line-earth)	≤ 700 V (C1 - 1 kV/500 A)
	≤ 900 V (C2 - 10 kV / 5 kA)
Response time t_A (line-line)	≤ 1 ns
Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.3 dB (≤ 12 MHz / 150 Ω)
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 60 MHz
Capacity (line-line)	typ. 30 pF
Capacity (line-earth)	typ. 30 pF
Resistance per path	< 0.1 Ω
Max. required back-up fuse	5 A (F)

Surge protection device - TTC-6P-3-EX-24DC-UT-I - 1064665

Technical data

Protective circuit

Impulse durability (line-line)	C1 - 1 kV / 500 A
	C3 - 100 A
Impulse durability (line-earth)	C1 - 1 kV / 500 A
	C2 - 10 kV / 5 kA
	D1 - 500 A
Pulse reset time (line-line)	≤ 30 ms
Pulse reset time (line-earth)	≤ 500 ms

Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12

Standards and Regulations

Standards/specifications	EN 60079-0 2012 + A11:2013
	EN 60079-11 2012
	EN 61643-21 2001 + A1:2009 + A2:2013
	IEC 60079-0 2011 (modified) + corrigendum 2012 + corrigendum 2013
	IEC 60079-11 2008
	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012

General

Maximum inner capacitance C _i	negligible
Max. internal inductance L _i	negligible
Max. input current I _i	400 mA (T4 / ≤ 50 °C)
	350 mA (T6 / ≤ 35 °C)
Max. input voltage U _i	30 V DC
Ambient temperature (operation)	-40 °C ... 35 °C (T6 / 85 °C)
	-40 °C ... 50 °C (T4 / 135 °C)

Conformity / approvals

UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D T4A
----------------	--

Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

